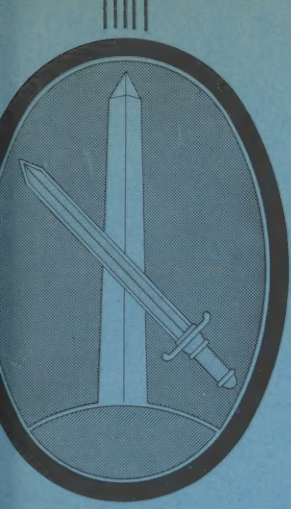


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MONTHLY HEALTH REPORT



MAY 1949

VOL 2 NO 5

MILITARY DISTRICT OF WASHINGTON

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MONTHLY HEALTH REPORT

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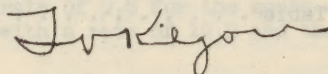
HEADQUARTERS, MILITARY DISTRICT OF WASHINGTON
The Pentagon, Washington 25, D. C.

INTRODUCTION

This publication presents periodic health data concerning personnel of the Department of the Army and Department of the Air Force personnel in the Military District of Washington. It provides factual information for measurement of increase or decrease in the frequency of disease and injury occurring at each of the posts, camps or stations shown herein.

It is published monthly by the Military District of Washington for the purpose of conveying to personnel in the field current information on the health of the various military installations in this area and on matters of administrative and technical interest. Items published herein do not modify or rescind official directives, nor will they be used as the basis for requisitioning supplies or equipment.

Contributions, as well as suggested topics for discussion, are solicited from Medical Department officers in the field.



FLOYD V. KILGORE
Colonel, MC
Surgeon

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CONTENTS

	PAGE
PREVENTIVE MEDICINE	
General Comment	1
Communicable Diseases	1
Table - General Data	2
Table - Specified Disease Rates	2
Venereal Disease	3
Table - Venereal Disease Rates	3
Chart - Admission Rates - Common Respiratory Diseases - Injuries	4
Chart - Venereal Disease Admission Rates by Month	4
Table - Consolidated Venereal Disease Statistical Report	5
Table - Venereal Disease Rates, U. S.	6
Chart - Venereal Disease Total Rates	6
Chart - Venereal Disease White Rates	7
Chart - Venereal Disease Negro Rates	7
Adverse Effects of Heat	8
PROFESSIONAL SERVICES	
Anti Histaminic Drugs in Common Cold Therapy	10
VETERINARY SERVICE	
Table - Veterinary Service	14
Q Fever	14
DENTAL SERVICE	
Table - Dental Service	15
OUTPATIENT SERVICE - Table	15
HOSPITAL MESS OPERATION - Table	15
ADMINISTRATIVE DIVISION	
List of Publications	16

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PREVENTIVE MEDICINE

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GENERAL COMMENT

Unless otherwise indicated, references to diseases and injuries in this publication apply to all Class I and II installations exclusive of Walter Reed General Hospital. Rates are calculated on the basis of a thousand mean strength per year.

In consideration of the present mode of operation of the Army Medical Department whereby Army and/or Air Force personnel may be receiving medical treatment at either type department installation, differential health statistics for the Air Force and Army should be evaluated as an overall index of the medical sections of the reporting unit.

The general health of the command has continued to be satisfactory. The non-effective rate has decreased to 7.99 for the present month from 9.57 for March.

Admissions for all causes after reflecting an increase last month have dropped to a rate of 319.7 for April. The rate for the month of March was 386.6. A total of 718 admissions were recorded for the present period compared with 680 for the previous month. The decrease in rate is due in part to an increase in troop strength of included units as well as the fact that the current report period covers 5 weeks against 4 weeks covered by the previous report.

A total of 674 admissions for disease during the five week period has resulted in a current rate of 300.1. This compares with rates of 356.9 for March and 334.5 for February. All stations contributed to this reduction except Fort Lesley J. McNair. That station reported a 12 point increase over the rate for March.

Only 44 admissions for injury were reported during the five week period as compared with 54 incurred during the last 4 week report. This resulted in a substantial reduction in the overall rate from 32.7 to 19.6 per 1000 per year. As with disease admissions the reduction was evident at almost all stations.

Psychiatric admissions increased to a rate of 9.8 for the month. Only two installations reported incidence of this disease, Fort Belvoir with a rate of 19.2 and the General Dispensary, USA with a 3.1 rate.

One death resulting from injury was reported during the report period by Fort Belvoir.

COMMUNICABLE DISEASE

The rate for common respiratory admissions for the period dropped from a March rate of 88.8 to 48.1 for the current period. Fort McNair was the only station to show an increase in rate for this disease. A current station rate of 92.2 is compared with 50.0 of last month.

Pneumonia admissions also decreased during the period to a rate of 6.2 as compared with 11.5 of the last report. Pneumonia atypical accounted for half the current 14 cases reported with a rate of 3.1

Incidence of influenza reflected a decline for the month to a rate of 13.8 from 18.9

A current rate of 21.4 for measles is a rise over the 14.3 rate reported for the past period. Admissions for mumps have decreased from 9.7 per 1000 per annum in March to 6.8 for this period.

Other communicable diseases, including Scarlet Fever, Tuberculosis, Diarrheal disease and Hepatitis showed no reasonable changes.

Pertinent Statistical tables may be found on pages 2 and 4.

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GENERAL DATA
5 Week period Ending 29 April 1949
(Data from WD AGO Form 8-122)

STATION	MEAN STRENGTH			ADMISSIONS						Non-Effective Rate	Number of CDD's	Number of Deaths
	Total	White	Negro	All Causes		Disease		Injuries				
				Cases	Rates	Cases	Rates	Cases	Rates			
Fort Belvoir	10,313	8,648	1,165	287	289.4	274	276.3	13	13.1	14.68	15	1
Fort McNair	1,015	935	80	43	440.6	39	399.6	4	41.0	4.48	0	0
Fort Myer (North Post)	1,740	1,533	207	15	932.4	144	860.7	12	71.7	6.34	0	0
Fort Myer (South Post)	1,811	1,811	0	55	315.8	54	310.1	1	5.7	1.74	0	0
General Dispensary, USA	6,737	6,708	29	134	206.9	128	197.6	6	9.3	2.18	0	0
All Others	1,742	1,742	0	43	256.7	35	208.9	8	47.8	1.10	0	0
Total Mil Dist of Wash	23,358	21,377	1,981	718	319.7	674	300.1	44	19.6	7.99	15	1
AMC - Med. Det. (Duty Pers)	1,646	1,476	280	67	423.3	60	379.1	7	44.2	27.62	3	0
AMC - Det. of Patients	1,093	983	170	95	903.9	90	856.4	5	47.5	1001.88	187	3
Army Medical Center - Total	2,739	2,459	110	162	615.1	150	569.6	12	45.5	416.40	190	3
Total Dept/Army Units	26,097	23,836	2,261	880	350.7	824	328.4	56	22.3	50.86	205	4
CLASS III UNITS												
Andrews Air Force Base	3,844	3,844	0	53	143.4	50	135.3	3	8.1	1.12	0	1
Bolling Air Force Base	5,022	5,021	1	185	383.1	163	337.6	22	45.5	9.33	0	0
1254th MATS	484	484	0	5	107.4	5	107.4	0	-	0.47	0	0
Total Dept/Air Force Units	9,350	9,349	1	243	270.3	218	242.5	25	27.8	5.50	0	1
Consolidated Total	35,447	33,185	2,262	1,123	329.5	1,042	305.7	81	23.8	38.89	205	5

ADMISSIONS, SPECIFIED DISEASES - RATE PER 1000 PER YEAR

5 Week Period Ending 29 April 1949

(Data From WD AGO Form 8-122)

STATION	Common Respiratory Diseases	Pneumonia All Types	Pneumonia Atypical	Influenza	Measles	Mumps	Scarlet Fever	Tuberculosis	Rheumatic Fever	Diar-rheal Disease	Hepatitis	Malaria	Psychiatric Diseases
Fort Belvoir	24.2	9.1	2.0	2.0	35.3	11.1	-	1.0	6.1	-	11.0	-	19.2
Fort McNair	92.2	-	-	-	-	-	-	-	-	10.2	-	-	-
Fort Myer (North Post)	167.4	17.9	17.9	125.5	65.7	17.9	-	-	-	6.0	-	-	-
Fort Myer (South Post)	23.0	-	-	17.2	-	-	-	-	5.7	5.7	-	-	-
General Dispensary, USA	43.2	3.1	3.1	7.7	1.5	1.5	-	-	-	-	-	-	3.1
All Others	89.6	-	-	-	6.0	-	-	-	-	-	-	-	-
Total Mil Dist of Wash	48.1	6.2	3.1	13.8	21.4	6.8	-	0.4	3.1	1.3	0.4	-	9.8
AMC - Med. Det.(Duty Pers.)	6.3	-	-	-	6.3	-	-	-	-	-	-	-	12.6
AMC - Det. of Patients	19.0	9.5	-	9.5	9.5	-	-	-	-	-	-	-	-
Army Medical Center-Total	11.4	3.8	-	3.8	7.6	-	-	-	-	-	-	-	7.6
Total Dept/Army Units	44.2	6.0	2.8	12.8	19.9	6.0	-	0.4	2.8	1.2	0.4	-	9.6
CLASS III UNITS													
Andrews Air Force Base	16.2	5.4	-	-	-	-	-	-	-	-	-	-	-
Bolling Air Force Base	37.3	12.4	12.4	26.9	8.3	4.1	-	-	-	12.4	4.1	-	26.9
1254th MATS	21.5	-	-	-	-	-	-	-	-	-	-	-	-
Total Dept/Air Force Units	27.8	8.9	6.7	14.5	4.4	2.2	-	-	-	7.8	2.2	-	14.5
Consolidated Total	39.9	6.7	3.8	13.2	15.8	5.0	-	0.3	2.1	2.9	0.9	-	10.9

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VENEREAL DISEASE: ARMY TROOPS

Venereal disease among troops of the Military District of Washington has increased since the previous report although the current rate is below that reported for the first two months of this year. The present rate is 20.93 as compared with 14.89 for March, and 21.96 and 22.18 for January and February respectively. An increased rate from 25.37 to 38.32 at Fort Belvoir and at Fort Myer North Post from 22.23 to 29.89 contributed to this general increase.

A total of 47 cases were reported during the five week period, 21 of which occurred among negro personnel and 26 among white troops. The respective rates are 110.25 and 12.65 per 1000 per annum.

At the Army Medical Center incidence of VD was confined to troops assigned to the Medical Detachment. A rate of 18.96 based on 3 cases is reported for that section of the installation. No cases were reported as occurring among personnel of the Detachment of Patients. The overall rate for the activity was 11.38.

VENEREAL DISEASE: AIR FORCE TROOPS

An increase in incidence of VD is also reported from among Air Force personnel. The present rate is 26.70 as compared with 18.23 for March.

One case was reported for negro personnel and 23 were incurred by white troops. The rate for white personnel was 25.59 and for negro personnel 1040.00. This later rate, however, is based on a strength of 1 and consequently is not a reliable gauge for comparison.

The term "Chargeable cases" as used in this report refers to those occurring among individuals assigned or attached to the reporting station at the time of the diagnosis.

Pertinent statistical tables and charts may be found on pages 4, 5, 6 and 7.

NEW VENEREAL DISEASE CASES - EXCL EPTS - MARCH AND APRIL

STATION	Rate per 1000 per year	
	MARCH 49	APRIL 49
Fort Belvoir	25.36	38.32
Fort McNair	12.50	10.25
Fort Myer (North Post)	22.24	29.89
Fort Myer (South Post)	13.42	-
General Dispensary, USA	-	-
All Others	6.68	17.91
Total Mil Dist Wash Units	14.93	20.93
AMC Med. Det. (Duty Pers.)	-	18.96
AMC Detachment of Patients	-	-
Army Medical Center - Total	23.36	11.32
Total Dept/Army Units, Mil Dist of Washington	15.82	19.93
CLASS III UNITS		
Andrews Air Force Base	16.73	13.53
Bolling Air Force Base	21.19	39.35
1254th MATS	-	-
Total Class III Units	18.23	26.70
CONSOLIDATED TOTAL	16.49	21.71

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CHART 1

ADMISSION RATES BY MONTH, ALL CAUSES, COMMON RESPIRATORY DISEASE AND INJURY

M DW RATE PER 1000 TROOPS PER YEAR

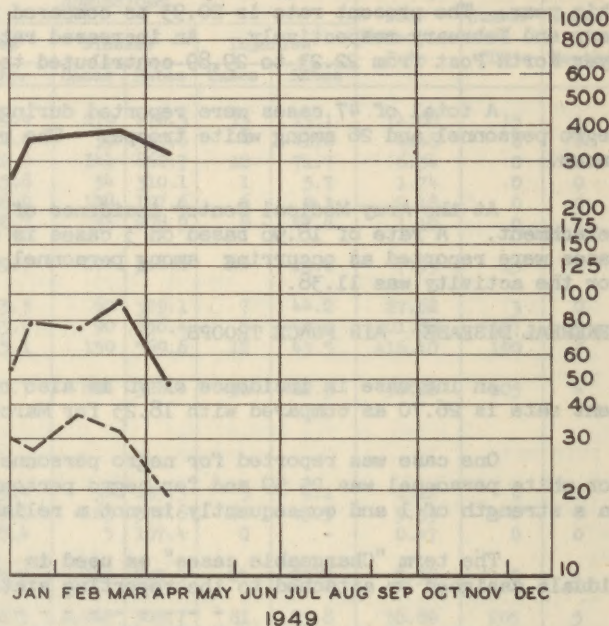
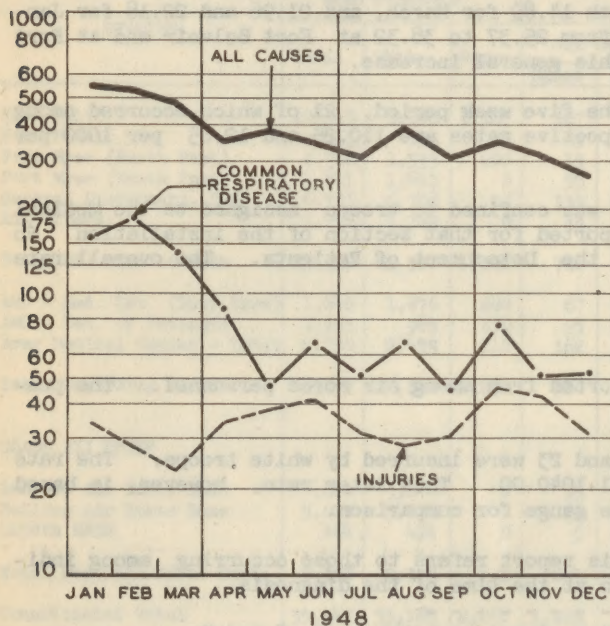
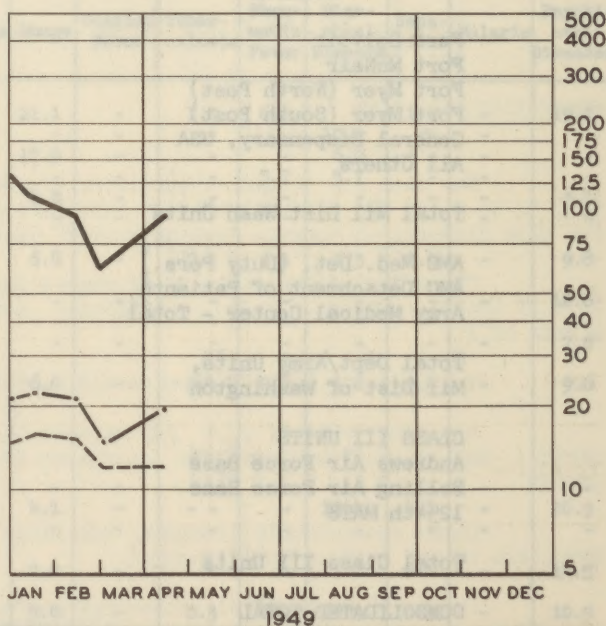
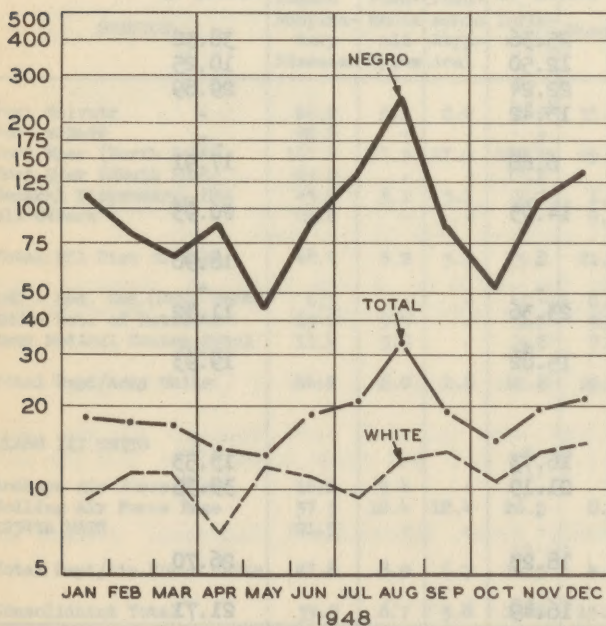


CHART 2

ADMISSION RATES BY MONTH VENEREAL DISEASES MDW INCL. ARMY MEDICAL CENTER

RATES PER 1000 TROOPS PER YEAR

INCLUDES ALL CASES REPORTED ON WD AGO 8-122 EXCEPTING THOSE EPTs



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CONSOLIDATED MONTHLY VENEREAL DISEASE STATISTICAL REPORT For the Five Week Period Ending 29 April 1949

(Data from WD AGO 8-122) (Chargeable Cases)

STATION	R A C E	Mean Strength	Number of Cases-EPTS Not Included				Rate per 1000 Troops per Annum	Total Days Lost From Duty (Old & New Cases)
			Syphilis	Gonorrhea	Other	Total		
Fort Belvoir	W	8648	0	19	0	19	22.85	9
	N	1665	5	14	0	19	118.68	26
	T	10313	5	33	0	38	38.32	35
Fort McNair	W	935	0	1	0	1	11.12	0
	N	80	0	0	0	0	-	0
	T	1015	0	1	0	1	10.25	0
Fort Myer (North Post)	W	1533	0	1	0	1	6.78	0
	N	207	0	3	0	4	200.97	0
	T	1740	1	4	0	5	29.89	0
Fort Myer (South Post)	W	1811	1	0	0	0	-	0
	N	0	0	0	0	0	-	0
	T	1811	0	0	0	0	-	0
General Dispensary, USA	W	6708	0	0	0	0	-	0
	N	29	0	0	0	0	-	0
	T	6737	0	0	0	0	-	0
All Others	W	1742	0	3	0	3	17.91	0
	N	0	0	0	0	0	-	0
	T	1742	0	3	0	3	17.91	0
Total Mil Dist of Wash	W	21377	0	26	0	26	12.65	9
	N	1981	6	15	0	21	110.25	26
	T	23358	6	41	0	47	20.93	35
Army Medical Center Medical Det. (Duty Pers)	W	1476	0	3	0	3	21.14	3
	N	170	0	0	0	0	-	0
	T	1646	0	3	0	3	18.96	3
Army Medical Center Detachment of Patients	W	983	0	0	0	0	-	506
	N	110	0	0	0	0	-	337
	T	1093	0	0	0	0	-	843
Army Medical Center - Total	W	2459	0	3	0	3	12.69	509
	N	280	0	0	0	0	-	337
	T	2739	0	3	0	3	11.39	846
Total Dept/Army Units	W	23836	0	29	0	29	12.65	518
	N	2261	6	15	0	21	96.59	363
	T	26097	6	44	0	50	19.93	881
CLASS III UNITS Andrews Air Force Base	W	3844	2	3	0	5	13.53	0
	N	0	0	0	0	0	-	0
	T	3844	2	3	0	5	13.53	0
Bolling Air Force Base	W	5021	3	14	1	18	37.28	28
	N	1	0	1	0	1	1040.00	0
	T	5022	3	15	1	19	39.35	28
1254th MATS	W	484	0	0	0	0	-	0
	N	0	0	0	0	0	-	0
	T	484	0	0	0	0	-	0
Total Dept/Air Force Units	W	9349	5	17	1	23	25.59	28
	N	1	0	1	0	1	1040.00	0
	T	9350	5	18	1	24	26.70	28
Consolidated Total	W	33185	5	46	1	52	16.30	346
	N	2262	6	16	0	22	101.15	363
	T	35447	11	62	1	74	21.71	909

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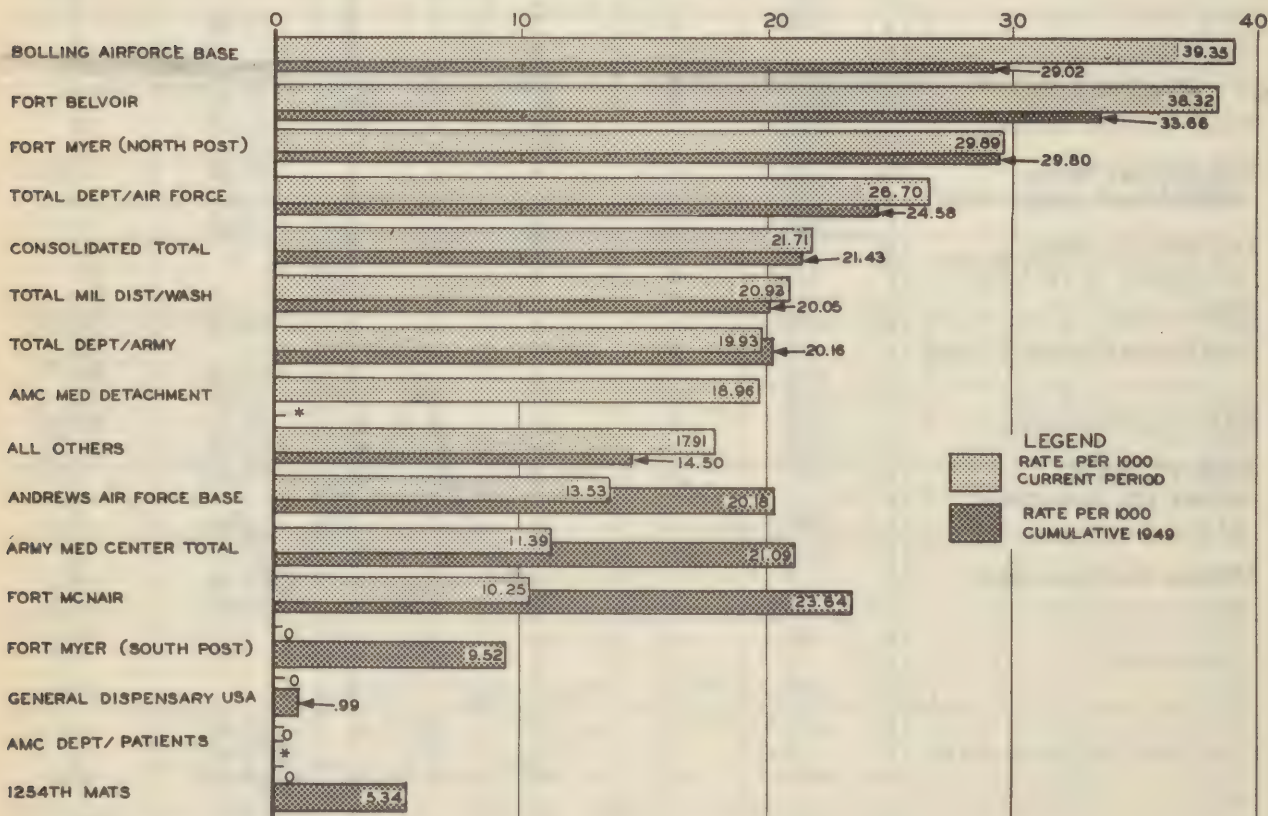
VENEREAL DISEASE RATES FOR THE US *

(All Army Troops)

	APRIL 1949	MARCH 1949
First Army Area	26	29
Second Army Area	25	22
Mil District of Washington	22	16
Third Army Area	22	27
Fourth Army Area	22	24
Fifth Army Area	14	18
Sixth Army Area	22	19
Total United States	22	23

* Compiled in the Office of the Surgeon General and include General Hospitals and Class III Installations.

VENEREAL DISEASE RATES PER 1000 PER YEAR FIVE WEEK & CUMULATIVE TOTALS ENDING 29 APRIL 1949 TOTAL WHITE & NEGRO PERSONNEL (CHARGEABLE CASES)



* Cumulative rates unavailable.

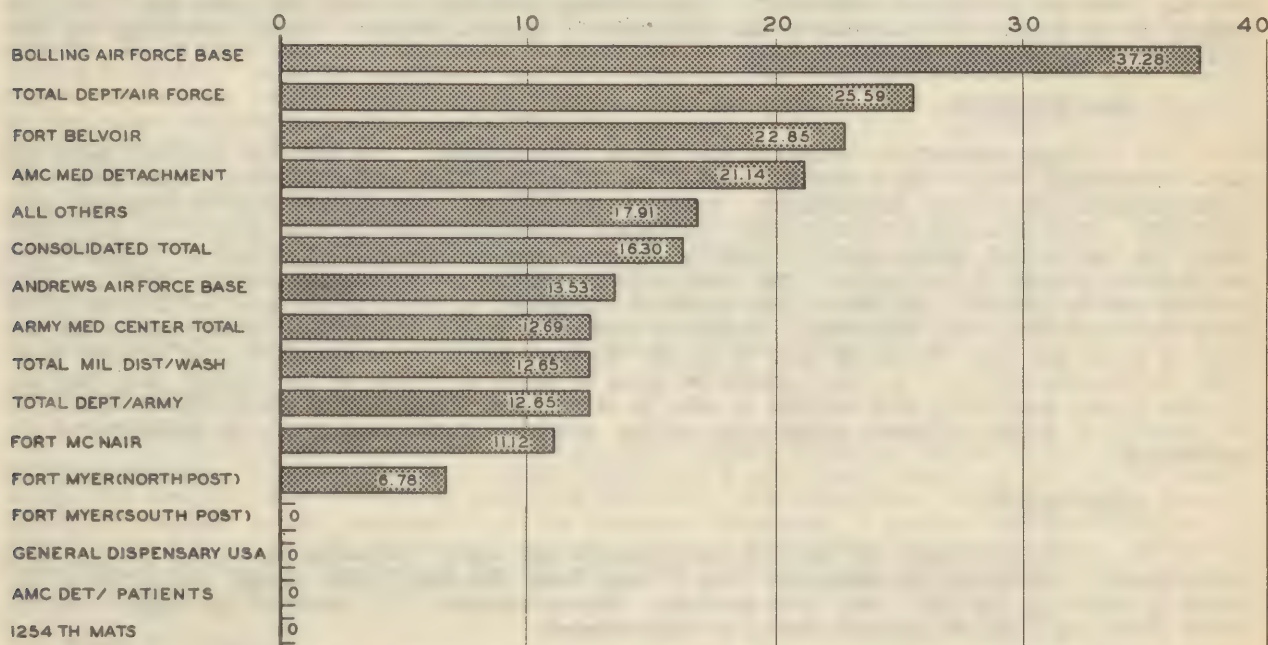
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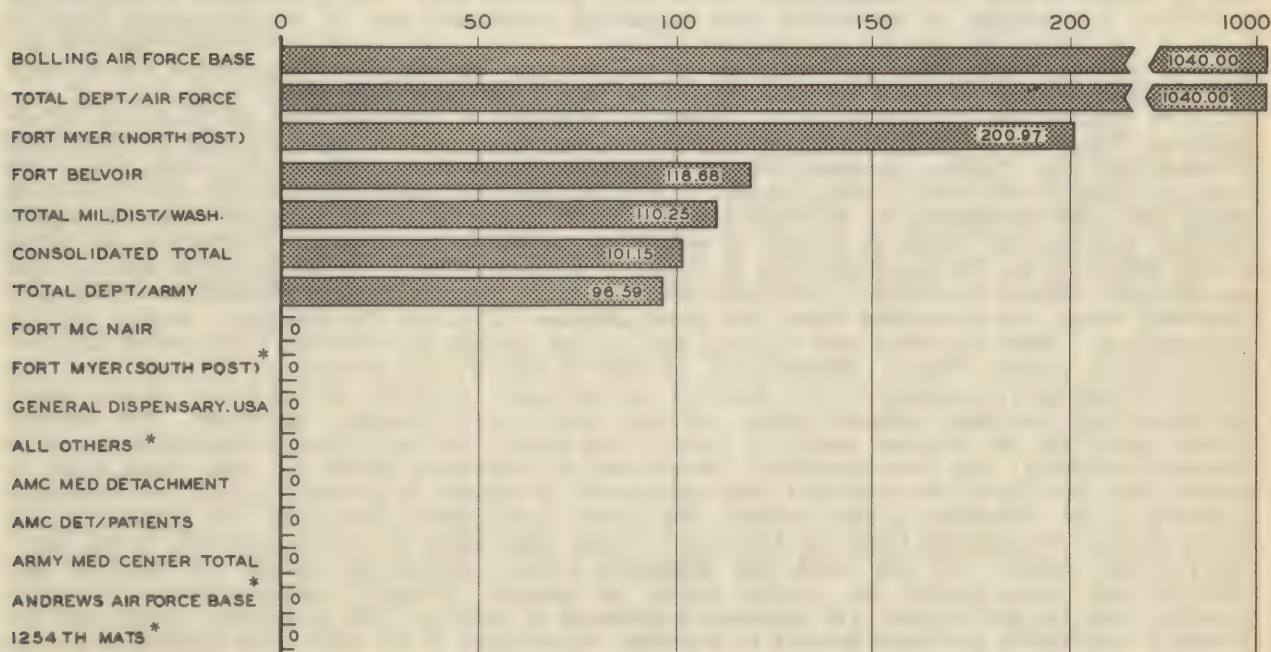
VENEREAL DISEASE RATE PER 1000 TROOPS PER YEAR 5 WEEK PERIOD ENDING 29 APRIL 1949

WHITE PERSONNEL (CHARGEABLE CASES)



VENEREAL DISEASE RATE PER 1000 TROOPS PER YEAR 5 WEEK PERIOD ENDING 29 APRIL 1949

NEGRO PERSONNEL (CHARGEABLE CASES)



* No Negro Personnel Assigned.

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PREVENTIVE MEDICINE

ADVERSE EFFECTS OF HEAT

Under conditions of exposure to high environmental heat and humidity, adverse effects of heat may occur in the exposed individual. Three fairly distinct clinical syndromes may occur, depending on the manner of breakdown of the individual's heat adjustment. These syndromes are heat exhaustion, heat cramps, and heat stroke.

HEAT EXHAUSTION

Heat exhaustion occurs as the result of excessive loss from the body of water and salt. Clinically, there are headache, mental confusion, vertigo, incoordination, drowsiness, extreme weakness, and visual disturbances. Occasionally cramps of the extremities or abdominal muscles occur. Consciousness is rarely lost. The mouth temperature may be subnormal or slightly elevated, but the rectal temperature is usually elevated (99° to 101° F.). The skin is usually cool and there is profuse perspiration. The pulse rate is rapid (140 to 200 per minute), and the blood pressure may be lowered. Any factor that promotes the return of blood to the heart will tend to relieve this condition. The individual should be removed to a cool place where he may rest. The deficit of water and salt should be made up by the administration of large quantities of salt solution. Saline solution (0.1 percent) should be given by mouth as freely as the patient will take it. If water is not available, salt tablets or salt in other forms should not be administered alone. In the presence of severe collapse, physiologic saline solution (2,000 cc.) should be administered intravenously.

HEAT CRAMPS

Painful cramps of the voluntary muscles may occur following exposure to heat. Heat cramps result primarily from excessive loss of salt from the body. Heat cramps are promptly relieved by replacing the salt lost from the body. Saline solution (0.1 percent) by mouth or intravenous physiologic saline solution should be administered.

HEAT STROKE

Heat stroke is a very serious condition with a high mortality rate. It is characterized by extremely high body temperature, usually with profound coma. The development of heat stroke represents a breakdown of the body's heat regulating mechanism, and it is particularly prone to occur in individuals who are not acclimatized to heat. In the great majority of cases there is absence of sweating, indicating that failure of the sweating mechanism is responsible for the high body temperature. All military personnel should be taught the importance of the recognition of cessation of sweating and the initiation of corrective measures at the stage when the condition is reversible. There may be premonitory symptoms of headache, dizziness, weakness, nausea, or diminished or absent sweating. Usually, however, the onset of heat stroke occurs with dramatic suddenness and there is collapse and loss of consciousness. Profound coma is usually present and convulsions may occur. The body temperature is markedly elevated (106° to 110° F.). The patient's skin is usually hot, red, and dry, and there is absence of sweating. In the early stages of heat stroke the pulse is full and rapid and the blood pressure is normal or elevated. Respirations are rapid and deep and may simulate Kussmaul breathing. Pulmonary edema may occur. As the patient's condition becomes progressively worse, the pulse rate rises, the blood pressure falls, and the breathing becomes shallow and irregular. Death may occur very rapidly, but, if the patient survives until the second day, recovery usually occurs. Rectal temperatures of 102° to 103° F. may persist for several days, and mental disturbances, excitement, and delirium may continue or recur. In the first few days after the temperature has been reduced from a critical level, severe relapses may occur. The patient should, therefore, be observed carefully during this period, and the rectal temperature should be recorded frequently. The heat-regulating centers may be extremely labile for many weeks after an attack. The lowering of the patient's body temperature as rapidly as possible is the most important objective in the treatment of heat stroke. The longer hyperpyrexia continues, the greater is the threat to life. Measures to lower the individual's body temperature should be initiated at the earliest possible moment. In the field, the patient's clothes should be removed. If there is any source of cool water nearby, the patient should be immersed in water; otherwise water should be sprinkled over the patient and its evaporation hastened by fanning. The attendants should rub the patient's extremities and trunk briskly to increase circulation to the skin. The patient should be removed to a hospital immediately and cooling measures continued during transportation. When the

PREVENTIVE MEDICINE

patient reaches the hospital, further cooling measures should be carried out immediately. If ice is available, the immersion of the patient in ice water is regarded as the treatment method of choice. Any water which is cool to the hand should be used for this purpose in preference to methods of cooling by evaporation. Continuous massage of the patient's extremities should be carried out to accomplish the dual purpose of stimulating circulation to the skin and stirring the water. If cool water is not available, the patient should be sprinkled with water and fanned to hasten its evaporation. It is undesirable and dangerous to lower the patient's temperature initially below 102° F. (rectal), since if this is done there may be a rapid fall of body temperature to critical levels. Rectal temperature should, therefore, be checked every ten minutes during this phase of treatment. If the rectal temperature falls below 94° F., the patient should be warmed cautiously until his temperature is restored to normal. Sedative drugs act to disturb the heat-regulating center and should be avoided as much as possible. When a sedative drug is necessary, a shortacting barbiturate, such as sodium pentothal intravenously, is the drug of choice. Sodium amytal and morphine are contraindicated. Atropine or other drugs which may interfere with sweating are contraindicated. Parenteral administration of physiologic saline solution, in moderate amounts, (1,000 to 1,500 cc.) is indicated. Care should be taken in the administration of parenteral fluids if there are signs of pulmonary congestion. Plasma should be administered if there is evidence of shock. Care should be taken in the administration of plasma if there is evidence of pulmonary congestion. Oxygen should be administered by face mask if cyanosis or pulmonary congestion is present.

PREVENTIVE MEASURES

During the hot summer months constant stress should be placed on the importance of drinking adequate amounts of water, and in maintaining a sufficient amount of salt in the body to lessen the possibility of casualties resulting from heat. Prescription of these preventive measures should be related to the assignments of the personnel concerned. A greater consideration must be given to the possibility of ill effect from heat to those individuals who are primarily employed in pursuits out of doors in the heat of the day than with personnel who are in comparatively sheltered and relatively cooler areas.

Water Requirements

At air temperatures in excess of about 95° F., the only means by which the body is cooled is through the evaporation of water from the skin and lungs. Any restriction of water below levels necessary for the man will result in rapid loss of efficiency.

Salt Requirements

In all circumstances, the loss of water through sweat is associated with a loss of salt. The amount of salt taken in the normal diet is adequate to make up salt loss when the total water intake is under one gallon per day. Above these levels, added salt is needed. It is best taken in solution. This is best done by making a solution of 0.1 percent table salt in the drinking water. Water containing approximately this amount of salt can be made as follows: (1) 1 pound table salt to 100 gallons of water; (2) 0.3 of a pound table salt to the Lyster bag (36 gallons); (3) 1/4 teaspoonful table salt to each canteen of water; (4) two 10-grain salt tablets dissolved in every quart of water consumed. Direct ingestion of salt tablets is not recommended because salt taken in concentrated form is not readily absorbed and hence may cause nausea and vomiting.

PROFESSIONAL SERVICES

ANTIHISTAMINIC DRUGS IN THE THERAPY OF THE COMMON COLD

Although the common cold is universally considered to be a minor affliction, its cost in days lost from employment has been reckoned at 100,000,000 a year (1) and the annual financial bill to the American public has been variously estimated at between 1 and 3 billion dollars (2). Although research has demonstrated a filterable virus as the causative organism (3) (4) as yet no specific treatment has been found (5) (6) and vaccines have not been generally accepted as being of benefit consistently (7). Despite this gloomy picture, it is believed that unusual promise for the future lies in the performance of some of the newer synthetic antihistaminic drugs as disclosed in the following report of a study of their effects in the treatment of the common cold. Their chemical structures, mode of action, therapeutic uses, and side actions have been well covered in articles by Feinbert (8) and Waldbott (10).

In a previous study (11) the unusually satisfactory results from the use of Benadryl as a therapeutic agent were reported. Encouraged by these findings, a new series was started in October 1947 to determine whether similar excellent results could be obtained with other antihistaminic drugs. "Clinics" or stations for the treatment of "colds" were established at three focal points on the compound. All personnel including the civilian employees were encouraged to report for treatment at the earliest possible moment after the onset of a cold. Pyribenzamine, Thenylene, Necantergan, and Histadyl as well as Benadryl, were included as the fundamental drugs used in the study. Since these drugs have a sedative effect, phenobarbital was first chosen as the control medication. However, it was hurriedly abandoned when the complaints of the recipients threatened the success of the study. The combination of codeine sulfate with papaverine hydrochloride, as advocated by Diehl (12) was then chosen as the control medication. It offered the advantage of being generally accepted as the preferred treatment for the common cold and thus provided a real criterion with which to compare the antihistaminic drugs.

The original objective was to determine the percentage of colds which could be aborted. As the series progressed it became plain that in spite of our best efforts most of the cases were going to be well-established colds; accordingly, therapy at any stage of a cold was undertaken. An effort was made to give the various drugs to patients in succession and without selection. Thus approximately every sixth patient received a control medication and an equal number of patients received one of the five drugs.

Patients were examined to exclude more serious diseases from the series. Because it is virtually impossible to make a differential diagnosis in the early stages of the acute upper respiratory infections (5) (6), the patient's diagnosis of a "cold" was accepted if the examining physician failed to find evidence to disprove it. This is in keeping with the conclusions reached by others (13).

Since the therapy under study was to consist of antihistaminic drugs it was considered important to determine whether or not any cures obtained occurred only in patients who were known to be allergic. Patients thus were quizzed as to previous existence of any manifestation of allergy, with emphasis on history of hay fever, asthma, eczema, migraine, chronic indigestion, periodic attacks of sneezing, and "sinus trouble."

Perennial allergic rhinitis as defined by Kern (14) and by Griep (15) was ruled out insofar as possible by history and examination. Smears of nasal secretions and differential blood counts were taken in a few cases late in the series to determine the presence of eosinophilia as an index to an allergic reaction. The number examined was too small to offer conclusive evidence, but there were cures in patients without eosinophilia.

The dose for adults was arbitrarily set at 50 milligrams for the antihistaminic drugs and at 16 milligrams each of codeine sulfate and papaverine hydrochloride for the control medication. Each patient was provided with enough medicine to carry him until the next morning and was instructed to repeat the doses at 4-hour intervals when awake, for at least 3 doses (more if symptoms persisted) and to report to the clinic the following morning. In order to establish their limitations as well as their therapeutic properties, no other medication was given with the antihistaminic drugs except stimulants to counteract their sedative effect. A 10-day follow-up check was made in most patients after discharge. Only ambulatory patients were treated in this series which included females as well as males. The youngest was 6 years of age and the oldest was 67. The group was made

PROFESSIONAL SERVICES

up of personnel attached to the hospital and included dependents and civilian workers.

A total of 572 patients were treated in the period from 1 October 1947 to 1 May 1948. A cold was considered to have been aborted or cured when all signs and symptoms disappeared completely within 24 hours of the beginning of treatment and remained absent for at least 48 hours after all treatment was stopped.

Findings

All symptoms were aborted in 19 (90 percent) of the 21 patients in whom treatment with antihistaminic drugs was begun within the first hour after the onset of symptoms and in 48 (87 percent) of 55 patients treated within 12 hours of onset were also cured.

A total of 77 patients were used as controls. The first five were given 32 milligrams of phenobarbital every 4 hours for 3 doses. However, when all complained of marked drowsiness and that it failed to relieve any of their symptoms, its use was discontinued. The combination of codeine sulfate with papaverine hydrochloride was then adopted as the control medication. Within 1 hour after onset of symptoms a cure was obtained in one of the two patients to whom this combination was given. Cure was obtained in 5 (42 percent) of 12 patients who received treatment within 6 hours, and in 7 (31 percent) of 22 patients in whom treatment was begun within 12 hours. In none in which therapy was begun more than 24 hours after onset was a cure obtained.

A personal history recorded in 383 of the 572 patients treated disclosed that 74 had suffered previously from some type of recognized allergic reaction. There were 319 who gave no history of having had any type of allergy previously. Antihistaminic drugs were given as treatment to 262 of these, with cures in 105. In 57 given codeine sulfate and papaverine hydrochloride there were 5 cures.

It is conceded that the number of controls is small by comparison but adequate (it is hoped) to conclusively demonstrate the superiority of the antihistaminic drugs in the treatment of the common cold in its initial stages.

In three patients treated personally by the writer, earache was an early (within 12 hours) symptom. Inspection disclosed marked injection of the periphery of the involved ear drum. Both the symptom and sign disappeared after three doses of an antihistaminic drug.

All of the antihistaminic drugs studied were found to be effective in aborting colds when taken within the first few hours after onset. In the majority of patients who received the antihistaminic drugs as the sole therapy and where treatment was begun too late to secure an arrest, the resultant colds were of short duration (3 to 5 days). These colds were remarkable because of the absence of complications and the mildness of the symptoms.

As a result of the small dose used, and the short periods in which treatment was required, there were no instances of severe reactions, severe side actions, or toxemia. Side actions noted were drowsiness, and dryness of the mouth; infrequently, headache and dizziness; and, rarely, nausea. A variation in severity of the drowsiness was noted. Benadryl had a pronounced sedative effect in almost every case in which it was used. This was found to be an asset in patients willing to remain in bed during treatment or when used only as the final night dose of antihistaminic drug in any case. However, it was a real hazard in ambulatory patients when more than one dose was taken. Pyribenzamine, Thenylene, and Histadyl all produced a moderate degree of sedation. Neocantergan was found to have little or no sedative effect in the majority of cases in which it was given, and thus became the favorite medication of the ambulatory patients who had had experience with any of the other antihistaminic drugs. All were warned that drowsiness was to be expected and were cautioned to avoid driving a car while under treatment.

To combat the sedative effect, racemic amphetamine sulfate (Benzedrine) in 2.5 to 5 mg. doses or dextro-amphetamine (Dexedrine) in 5 to 10 mg. doses were frequently given with the initial dose of antihistaminic drugs whenever treatment was begun before 4 o'clock in the afternoon. These effectively reduced the sensation of drowsiness in most cases and had the happy effect of lifting many patients out of the mild mental depression that is often a symptom in colds. Benzedrine should not be prescribed in the presence of arterial hypertension, cardiovascular disease, or nervous ten-

PROFESSIONAL SERVICES

sion; and to avoid wakefulness at night, neither drug should be taken later than 4 o'clock in the afternoon (16).

One patient, whose wife had had Benadryl prescribed for hay fever elsewhere, in his enthusiasm took 200 mg. of Benadryl within a period of 4 hours. He became disoriented and confused for a short period of time but recovered completely following a night's sleep. Another patient, with an active chronic duodenal ulcer, was as much impressed with the relief he obtained from ulcer symptoms as by the abortion of his cold.

It has been established that an attack of the common cold provides an immunity lasting from 3 to 7 weeks (17). It was observed in this study that even the very mild and attenuated colds that resulted from prompt and continued treatment with the antihistaminic drugs conferred a normal degree of immunity. It was further observed that the cure of a cold become progressively more difficult the longer the time interval separating the present attack from the last cold experienced, and that, lacking immunity in the presence of an epidemic, the treatment frequently had to be repeated at 2-to 5-day intervals. Thus, it would seem that when a cold is aborted, we actually postpone it, and that eventually it might become wiser to accept (conceivably select) a mild variety and treat it early and carefully to obtain the immunity it will confer.

Discussion

The medical literature of the past 2 years contains many reports of the favorable results obtained with the antihistaminic drugs in treatment of a wide variety of allergic conditions. From this fact, and from the phenomenal cure of the very early colds, it is assumed that the common cold begins as an allergic reaction. This assumption is supported considerably by the pronounced similarity of the symptoms of an acute head cold to those of that other typical allergic reaction, hay fever.

That under normal conditions most individuals harbor pathogenic bacteria in their respiratory organs was demonstrated long ago (18) (19) (20). The phenomenon of the pathogenic organisms suddenly assuming accelerated growth and invasive characteristics in the presence of the virus infection of the common cold might well be as follows: (a) cold virus present in upper respiratory tract; (b) trigger mechanism (chilling, ingestion of food or drink to which one is sensitive, inhalation of irritant); (c) allergic reaction producing edema of the mucous membrane of the respiratory tract (localized and patchy); (d) loss of normal protective power by the thus damaged mucous membrane, which in turn provides a culture medium for the virus and pathogenic organism; (e) invasion of the body by pathogenic organisms causing complications of the common cold. Assuming the above to be correct, then the common cold is aborted or cured when the allergic reaction is reversed before irreparable damage has been done to the respiratory mucous membrane. This theory also offers a possible explanation of the variation in susceptibility to colds observed among members of any large group of individuals.

Timeliness is of prime importance in the successful treatment of the common cold with antihistaminic drugs, and that the effectiveness of the treatment is inversely proportional to the lapse of time following the onset of symptoms before treatment is begun. This feature limits their usefulness. Even in this series where treatment was free, the clinics almost as conveniently located as drinking fountains, and with considerable publicity and insistent urging that patients report for treatment early, the average patient and 75 percent of those under 25 years of age did not report for treatment until 48 hours after the onset of symptoms. Early treatment was sought by those to whom a cold had become a serious illness, a threat to their jobs or to their social plans. This may prove to be the case generally, but the treatment with antihistaminic drugs should prove invaluable to patients already seriously ill or injured, to the aged, to statesmen, to concert, radio, and movie artists, in large industrial plants, and, conceivable, in certain military or naval operations where manpower is at a premium and where personnel can be controlled. It is believed that real progress in the elimination of the common cold will be made when and if an antihistaminic drug which is effective and yet sufficiently safe to permit the public to purchase it without a prescription is developed.

There will be many who will quite properly challenge the possibility of diagnosing a cold within the first hour of symptoms. When one has been as unusually susceptible to colds all his life as the writer has been, and then lives an entire year without a cold as he has done by the simple

PROFESSIONAL SERVICES

expedient of taking one or two doses of an antihistaminic drug at the first hint of a cold, the problem of diagnosis becomes academic. This was accomplished despite the fact that exposure to acute colds was an almost daily occurrence in his "clinic" for colds.

It is ventured that the elimination of the factors responsible for the spread of colds; the sneezing, coughing, and profuse discharge from the nose, should operate to eliminate a large proportion of the colds that now occur. This we know the antihistaminic drugs will do, in most cases, at any stage of a cold. What the eventual effects of prolonged use of these drugs will be remains to be seen; however, after over 2 years of rather wide usage, the literature is not yet burdened with adverse reports.

Patients were cautioned and carefully observed during their first course of treatment and when there was assurance that no untoward side actions had been experienced, a small additional amount of the drug, to be kept by the patient for use in aborting future colds, was prescribed. This practice proved unwise from the standpoint of collecting statistics. During late January and February the number of cases appearing at the clinics declined markedly. Investigation disclosed that former patients were not only aborting their own colds, but those of their families and friends.

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POUNDS MEAT AND MEAT FOOD AND DAIRY PRODUCTS INSPECTED APRIL 1949
(Data obtained from WD AGO Form 8-134)

STATION	CLASS 3	CLASS 4	CLASS 5	CLASS 6	CLASS 7	CLASS 8	CLASS 9	TOTAL
Fort Lesley J. McNair		58,589	85,323		144,911	12,434		301,257
Fort Belvoir, Virginia		253,076	252,186		538,081	74,063		1,117,406
Potomac Yards Distribution Point		301,386	124,520	408,659				834,565
Fort Myer, Virginia		185,262	221,375		360,421	5,182		772,240
Mil Dist/Washington Vet Det	242,866							242,866
US Navy	156,164							156,164
The Pentagon						339,652		339,652
Total	399,030	798,313	683,404	408,659	1,043,413	431,331		3,764,150
Army Medical Center		166,066	64,367		230,433	5,271		466,137
Washington Quartermaster		21,776	73,615		109,626	8,043		294,060
Andrews Air Force Base		68,792	64,258		144,959	15,970		293,979
Bolling Air Force Base		136,726	153,880		245,670	30,146	1,954	568,376
Total	393,360	393,360	356,120		811,688	59,430	1,954	1,622,552
Grand Total	399,030	1,191,673	1,039,524	408,659	1,855,101	490,761	1,954	5,386,702
REJECTIONS:								
Mil Dist/Washington Vet Det	3,479							3,479
Not type, class or grade								
US Navy	28,056							28,056
Not type, class or grade								
Fort Lesley J. McNair		50						50
Not type, class or grade								
The Pentagon						22		22
Insanitary or Unsound								
TOTAL REJECTIONS	31,535	50				22		31,607

Q FEVER

Q fever has been added to the long list of diseases transmissible from animals to man. It recently acquired an important place in the field of comparative medicine when it was found that the disease effected man in the form of pneumonitis. Q fever has a world wide distribution, having been determined as endemic in Australia, North America, Central America, various countries of Europe, the Mediterranean area and possibly in India. Cases were reported in the allied troops in Italy during World War II. Outbreaks were also reported in the German soldiers stationed in Greece during the occupation.

Studies conducted by Derrick of Australia in 1937 and by Davis, Cox and Parker of the US Public Health Service in 1938 revealed the causative agent to be a rickettsia-like organism called *Coxiella burnetii*. It has been isolated from several species of ticks and may exist in nature in these arthropods. Early epidemiological studies indicated it to be transmitted from its natural habitat to domestic animals and to man. More recently studies of the occurrence of Q fever in laboratory personnel, packinghouse workers, stockyard employees and dairy farmers show that one of the important methods of transmission to man is through contaminated air.

At the present time very little is known of the means of its natural existence, the manner in which it is transmitted from nature to domestic animals and man or the methods of transmission within the species of man and domesticated animals.

Investigations in America reveal the fact that *Coxiella burnetii* frequently gives rise to a milk mastitic condition in cattle, and is shed in milk from such infected udders. This organism has been isolated from milk in Southern California and in Southwest Texas. Calves have been infected by feeding them on milk from infected cows. No human cases have been definitely traced to the ingestion of infected raw milk. However, several cases have occurred in this area wherein ingestion of raw milk appears to have been the only logical means of transmission. It seems reasonable that raw milk is a source of infection for the human family, although the actual proof is lacking. Recently Q fever was found in individuals having been exposed to cows whose blood showed serum antibodies for the disease.

This disease is a growing Public Health problem, since it affects both domesticated animals and man and since recent studies indicate that raw milk from infected cows may contain the bacteria. Studies reveal that pasteurization temperatures destroy the organism. Experiments also show that when unpasteurized milk containing *Coxiella burnetii* is used for the production of butter, the finished product as well as all by products may harbor the causative agent. Freezing the butter for 41 days did not destroy the bacteria.

It seems logical to conclude, in the light of this information, that the Q fever organism, *Coxiella burnetii* is a disease agent that is important to the milk industry, and that raw milk may very well be a medium for its dissemination.

RESTRICTED

DENTAL SERVICE

DENTAL SERVICE - MONTH OF APRIL 1949

STATION	Offi- cers	Days of Duty	Sit- tings	Amal- gam	Oxy and Amal	Sili- cate	In- lays	Bridges	Bridge Repair	Crowns	Dentures			Extrac- tions	Calcu- lus Removed	X-Rays	Exami- nations
											Full	Par- tial	Re- pair				
Fort Belvoir	6	161	1319	551	530	302	0	3	3	0	8	21	9	446	174	148	943
Fort McNair	1	30	529	253	106	31	0	1	0	0	1	5	2	68	106	69	78
Fort Myer (North Post)	1	27	935	205	46	51	3	1	3	0	3	15	8	44	13	675	405
Fort Myer (South Post)	1	30	340	145	25	23	0	0	1	0	4	1	0	75	5	230	114
General Dispensary, USA	3	88	1934	273	103	114	3	1	10	3	4	45	15	66	275	384	827
All Others	1	12	22	5	3	1	0	1	0	0	0	5	1	1	0	2	20
Total Mil Dist of Wash	13	348	5079	1432	813	522	6	7	17	3	20	92	35	700	573	1508	2387

OUTPATIENT SERVICE

Consolidated statistical data on the outpatient service, Military District of Washington, less Walter Reed General Hospital, and U.S.A.F. installations for the five week period ending 29 April 1949, are indicated below:

ARMY:

Number of Outpatients.....17,138
Number of Treatments.....30,553

NON-ARMY:

Number of Outpatients.....14,193
Number of Treatments.....24,225

NUMBER OF COMPLETE PHYSICAL EXAMINATIONS CONDUCTED..... 3,248

NUMBER OF VACCINATIONS AND IMMUNIZATIONS ADMINISTERED..11,144

HOSPITAL MESS ADMINISTRATION (Data from WD AGO Form 8-210)

STATION	January 49	February 49	March 49	April 49
FORT BELVOIR				
Income per Ration	\$ 1.165	\$ 1.113	\$ 1.071	\$ 1.059
Expense per Ration	1.067	1.015	1.054	1.045
Gain or Loss	+ 0.098	+ 0.098	+ 0.016	+ 0.014

ADMINISTRATIVE DIVISION

Following is a list of publications which are of particular interest to the Medical Department:

DEPARTMENT OF THE ARMY CIRCULARS

Cir No.	Subject	Date
52	Recision of WD Cir 370 1946	11 April 49
53	Army Regulations and Special Regulations	11 April 49
56	ASF Manuals	14 April 49
58	Iowa State World War II Service Compensation	18 April 49
60	Recision of certain WD/DA Publications	20 April 49
63	US Saving Bond Campaign	21 April 49
64	Credit Points for Retention in Active Reserve	21 April 49

DEPARTMENT OF THE ARMY MEMORANDA

Memo No.	Subject	Date
40-590-15 C1	Report of Treatment of Pay Patients	25 April 49

DEPARTMENT OF THE ARMY SPECIAL REGULATIONS

SR No.	Subject	Date
32-20-1	Clothing and Equipage	27 April 49
40-110-1	Medical Exams for Flying	14 April 49
40-985-1	Medical Records and Reports - Sick and Wounded Animals	19 April 49
40-1025-1	Basic Diagnosis Nomenclature	1 April 49
380-5-10	Military Security	20 April 49

MILITARY DISTRICT OF WASHINGTON MEMORANDA

Memo No.	Subject	Date
25	Wearing of the Summer Uniform	5 April 49
28	Opportunity Drive Saving Bonds	28 April 49

MILITARY DISTRICT OF WASHINGTON CIRCULARS

Cir No.	Subject	Date
20	AR 615-300, Retention of Officers, ERC	11 April 49
22	Active Duty, Retention of MC Officers	18 April 49
24	Retention of MC Officers	27 April 49

RESTRICTED